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In the dark, all cats are gray

"In the dark, all cats are gray." This French saying illustrates the condition of statewide water planning analysis in California, as far as much policy-making is concerned. The lack of light shed by our analytical tools makes alternatives indistinguishable. This lack of clarity reduces the ability of the political process to develop and select effective water management alternatives, greatly increases the controversy and difficulty of developing and implementing solutions, and thus delays effective action.

Most planning analysis and data collection for California's statewide water resources were developed for an era of large-scale water facility development. Our analysis capability continues to specialize in the operation and planning of the large State and Federal water projects. Most analysis largely neglects the local and regional activities which are the hallmark of current water management, such as water conservation, conjunctive use of ground and surface waters, water transfers, and wastewater reuse. California's water system has become considerably more integrated and diversified in recent decades, with local agencies tasking a larger role in regional and statewide water management. Our tools for aiding regional integration and integrating management across regions are lacking. Thus, regional integration is hindered and cooperation among regions is more difficult.

DWR's data collection and analysis capabilities must be substantially re-directed and re-engineered to re-orient DWR planning to aid, support, and integrate local and regional efforts. Like state budgeting and political campaigning, this process can never be completely finished, but is nonetheless urgent and important.

A Proposed Process

The CWP should immediately convene a series of workshops on the current and future needs for California water data and analysis. These workshops should air ideas, thoughts, and proposals on this problem, and stimulate thinking. Speakers should cover a range of backgrounds and interests. Current DWR data and analysis managers should be included in these workshops. Water agencies, stakeholders, speakers, and interested members of the public would be encouraged to develop white papers on the subject. These opinion pieces should be available on a CWP web site, where additional comments, feed-back, and suggestions can also be collected.

Concurrent with this activity, DWR would produce a concise public document, reviewing the status of major modeling and data collection efforts most relevant to statewide water planning. This document would include critical assessments of data and model limitations and strengths.

A small panel should be charged with attending the workshops, reviewing the above ideas, and discussing with others to develop a draft strategic proposal for organizing, overseeing, accomplishing, reviewing, and funding statewide water data and analysis for California. This draft proposal would be the subject of public and CWP workshops suggesting refinements by the panel. A draft strategic plan would be completed April 2004, with a final version by June 2004. DWR would then submit a final strategic plan as part of the California Water Plan Update.

Some Suggested Principles for Strategic Water Analysis for California

(Well, here's a shot at such a thing anyway.)

Strategy:

- 1) A frequently amended strategic document will lay out DWR's strategic analysis framework and identify the technical objectives, roles, and responsibilities of major DWR data collection efforts and analytical tools and their interactions and their responsible managers.

Transparency:

- 2) All data and models should be in the public domain and available on the web.
- 3) All data and models should have significant documentation.
- 4) Known limitations should be documented.

Longer-term viability:

- 5) Modularity: Major analytical tools will be designed and implemented to fit modularly and explicitly within the larger strategic analysis framework.
- 6) Adaptive data management framework: Major data efforts will fall within a larger data management framework, including protocols for data documentation and updating, and documentation of limitations.
- 7) A frequently-updated document will outline short-term and long-term efforts, budgets, and responsibilities for continuous improvement of analytical tools and data, with policy for continued user, local agency, and stakeholder involvement.

Coverage:

- 8) The spatial coverage of the basic data and analytical framework will be statewide.
- 9) Local and regional water management and resources will be explicitly represented.

Accountability and Quality Control:

- 10) In developing analytical tools, significant efforts should be made to involve local agencies and stakeholders.
- 11) Major analytical products will undergo external review by a) external unaffiliated experts and b) local agencies whose systems are included in the model.
- 12) DWR's strategic analysis framework will undergo periodic internal and external review.

Suggestions for Contents of a Strategic Analysis Plan

(A first shot at it anyway.)

- 1) Policy and technical objectives
- 2) Principles
- 3) Plan
- 4) How implementation will accomplish principles
- 5) Timing
- 6) Funding
- 7) Responsibilities for implementation